Perceptions on Joint Venture Companies

Report 6-85

Prepared for:

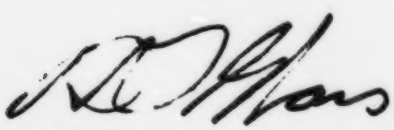
Department of Indian Affairs and Northern Development
Les Terrasses de la Chaudiere
Ottawa. K1A 0H4

Robert M. Bone
David A. Stewart
Department of Geography
University of Saskatchewan
Saskatoon, S7N 0W0
December 1985

PREFACE

In 1982, the Department of Indian Affairs and Northern Development began its socio-economic impact monitoring program in connection with the Norman Wells Oilfield Expansion and Pipeline Project. This program, carried out under the direction of Professor R.M. Bone of the University of Saskatchewan, is, we believe, the first of its kind. Focussing on four Mackenzie Valley communities in the vicinity of the Norman Wells Project, this study was specially designed to allow monitoring of selected social and economic impacts through field surveys done before, during and after construction. The objective of the first field program, carried out in 1982, was acquisition of the baseline data, while the 1983 and 1984 field surveys captured the situation during the active construction phase. The 1985 fieldwork, done for the first time in all four of the survey communities by native organizations, provided the picture for the immediate post-construction period.

Various aspects of the 1982-84 portion of the project were analysed in the 1984 series of reports. This series discusses certain perspectives from the 1985 work, and, as well, deals with changes in selected factors between 1982 and 1985. In a subsequent, and final, series subjects dealt with will include the overall impacts of the Norman Wells Project and a discussion of the monitoring of socio-economic impacts in Canada.



R.D. Glass
Director General
Constitutional Development and
Strategic Planning Branch

TABLE OF CONTENTS

1.	Background	1
2.	Shehtah Drilling Ltd.	4
3.	The Joint Venture Question	8
4.	Response Change from 1982 to 1985	9
5.	Community Variations	12
	5.1 General Pattern	13
	5.2 Fort Simpson	14
	5.3 Fort Norman	19
	5.4 Wrigley	20
	5.5 Norman Wells	22
6.	Conclusions	24
7.	References	27
8.	Appendix A	28

BACKGROUND TO THE NORMAN WELLS SOCIO-ECONOMIC IMPACT MONITORING PROGRAM

In mid-1979, Esso Resources Canada Ltd. and Interprovincial Pipeline Ltd. initiated discussions with the federal government concerning a major resource development project in the Mackenzie Valley in the Northwest Territories. This project, the Norman Wells Oilfield Expansion and Pipeline Project, was designed to increase production of oil at Norman Wells and carry this increased production through a small diameter pipeline from Norman Wells to Zama, Alberta to connect with the national oil pipeline system. The proposed project was brought to the attention of people in the Mackenzie Valley communities through community information meetings arranged by the companies and designed to inform local residents and businessmen of the potential job and contract opportunities associated with project construction.

During 1980, public hearings were held in northern communities by both the Federal Environmental Assessment and Review Office and by the National Energy Board. These public hearings provided a forum for individuals, native organizations, village councils, government agencies, companies and special interest groups to present their views on the proposed project and the implications of such development for the North and native peoples. The question of involvement of northern residents and businesses in the Norman Wells Project was of major concern during the public hearings, and both the federal and territorial governments indicated that the degree of northern participation in the project would be a key factor in their consideration of whether to approve or reject the Norman Wells Project. On July 30, 1981, the federal government announced its approval, subject to a two-year delay in the commencement of construction to allow government, the companies and northerners time to prepare for their participation in this project.

In early 1982, the Department of Indian Affairs and Northern Development recognized the need to monitor the impacts of the project on the four communities located along the pipeline route. These communities, Norman Wells, Fort Norman, Wrigley and Fort Simpson, were regarded as the ones most likely to receive the bulk of the socio-economic impacts caused by the construction of the Norman Wells Project. All of the socio-economic impacts had potentially positive and negative effects on the communities and local people, and the monitoring program was intended to capture these and evaluate them against the background of pre-construction baseline data on selected indicators.

Carried out by the Department of Geography of the University of Saskatchewan under the direction of Dr. Robert M. Bone, the monitoring program consisted of gathering data from local residents on their household and business characteristics over the course of the construction phase. The framework for this work consisted of three parts: (1) pre-construction phase; (2) construction phase; and (3) a post-construction phase. The field work and data preparation took place from 1982 to 1986. A series of reports based on the data may be obtained from the Department of Indian Affairs and Northern Development.

1. BACKGROUND

In June 1979, Esso Resources Canada Ltd. (Esso) initiated discussions with the federal government concerning an expansion of oil production at the Norman Wells oil fields. This proposal, known as the Norman Wells Oilfield Expansion and Pipeline Project, was introduced into Mackenzie Valley communities through community information meetings arranged by Esso and Interprovincial Pipe Line Ltd. (IPL). These company organized meetings were designed to inform local residents and businessmen of potential job and contract opportunities associated with the proposed construction project.

Public hearings were held in northern communities by both the Federal Environmental and Review Office (FEARO) and the National Energy Board (NEB). These public hearings provided a forum for individuals, native organizations, village councils, government agencies, companies and special interest groups to present their views on the proposed project and its implications for the North. Among other major issues emerging at these hearings, the question of northern involvement in the Norman Wells Project was a primary concern of local residents and these concerns were prominent in reports produced by the Environmental Assessment Review Panel and the National Energy Board. Both the federal and territorial governments indicated that northern participation in the proposed project would be a critical factor in their decision to approve or reject the Norman Wells Project.

In June 1981, Esso responded to this concern with a proposal for a partnership between themselves and the Dene Nation/Metis Association in the ownership and operation of a drilling rig. The purpose of this proposal was to involve native peoples directly in the Norman Wells Project. A short time later, Esso officials and senior representatives of the Dene Nation and the Metis Association met to discuss this concept. Following this meeting, all parties expressed interest in the idea of forming a partnership and further talks were planned.

In July 1981, the Minister of the Department of Indian Affairs and Northern Development (DIAND), Mr. John Munro, announced that the Norman Wells Project had been approved by the federal cabinet with the condition that there be a two year delay in the project start-up. During this "delay", the Minister hoped that native peoples and their organizations could better prepare themselves for the expected business and job opportunities. To that end, Mr. Munro made reference to the Esso/Dene/Metis joint venture discussions and he offered encouragement by suggesting that government funding would be available to enable the native organizations to enter into such a partnership (Canada, 1983, p. 1-2).

During the course of the next two years, negotiations continued. In part, the decision by the two native organizations to participate with Esso was a difficult one for political and

philosophical reasons. The major political factor was related to the strongly held view of the Dene that "... there should be no development before a land settlement is obtained in the western NWT." (FEARO, p. 23).

From a philosophical perspective, the Dene still adhere to the share ethic principle and therefore the idea of entering into a working relationship with a multinational corporation to make profits posed some basic problems. For instance, the Dene Nation wanted the proposed joint venture company to use incentives other than competition to motivate workers and to develop a consensus style of management decision making on issues such as promotion selection, division of labour, payment, hiring and firing (News North, September 16th, 1983). The Dene solution was to have their Denendeh Development Corporation operate as a co'lective organization by having its share of the profits from the joint venture returned to the Dene through investments into needed community projects.

The political issue was just as difficult to revolve. However, with the Norman Wells Project underway, the Dene concluded that it was in their interest to enter into a partnership with a multinational corporation. As James Ross, the Vice-President of the Dene Nation explained it, " The development of the North is taking place whether we like it or not. So we might as well try to get some of the benefits for ourselves."

(Globe and Mail, March 29th, 1983). Some of these benefits relate to management skills and experience expected to be learned from this joint venture by Dene employees. After a land claims settlement, these Dene managers can serve other Dene interests, such as managing Dene corporations and investment funds.

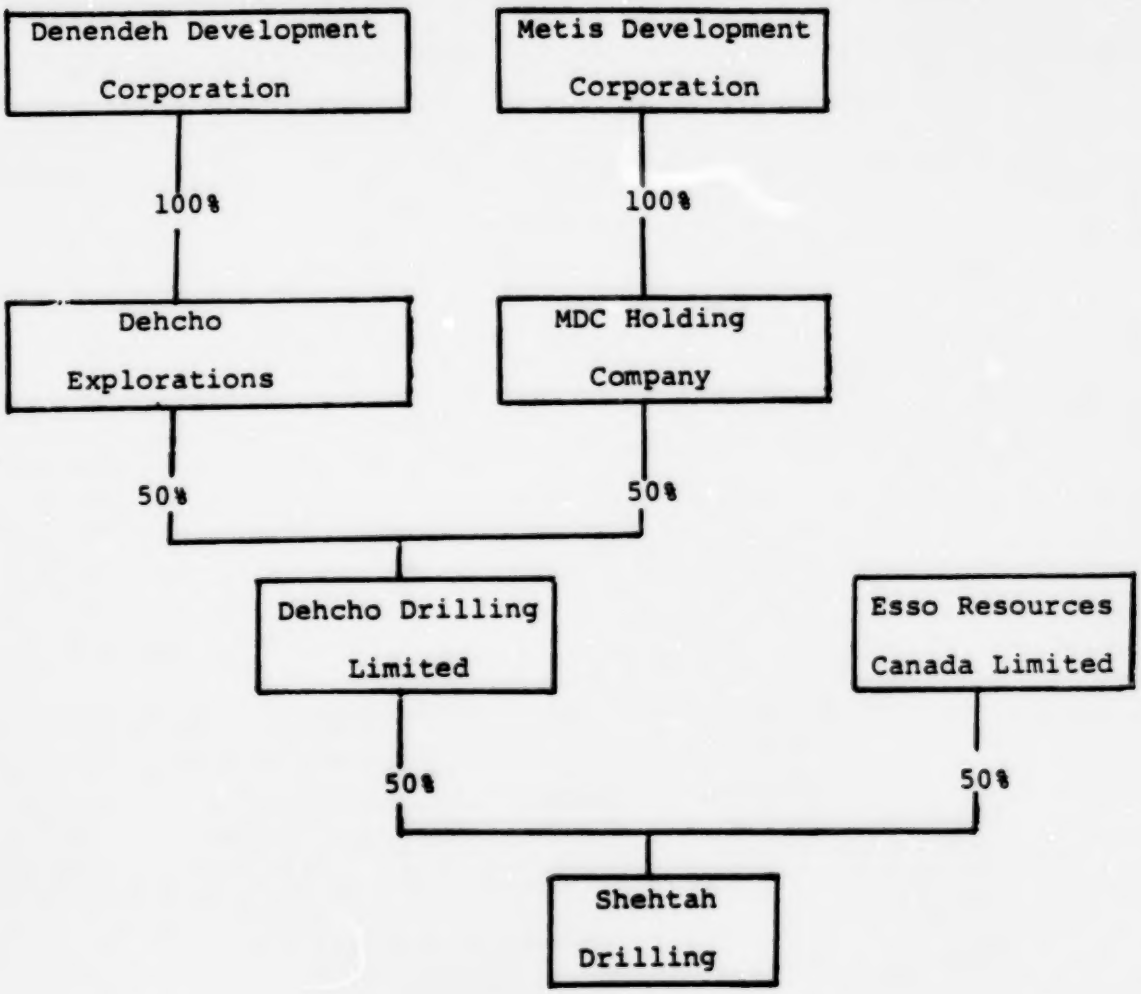
In the end, the Dene Nation was able to revolve its philosophical and political concerns and the partnership of the two native organizations (the Dene Nation and the Metis Association) with Esso was formed on July 1, 1983. This partnership was seen by the federal government as an opportunity for northern native peoples to take a lead role in a major economic activity and to benefit accordingly. (Canada, 1983, p. 2).

2. SHEHTAH DRILLING LTD.

The ownership of Shehtah Drilling Ltd. reflects the original proposal of Esso to create a partnership between the two native organizations and Esso. Each owns half of Shehtah Drilling. In the case of the native organizations, they created a series of corporations, namely development corporations, holding companies and Dehcho Drilling Limited. The relationship of these corporations to the native organizations and Shehtah Drilling Ltd. is shown in the diagram below (Figure 1).

FIGURE 1

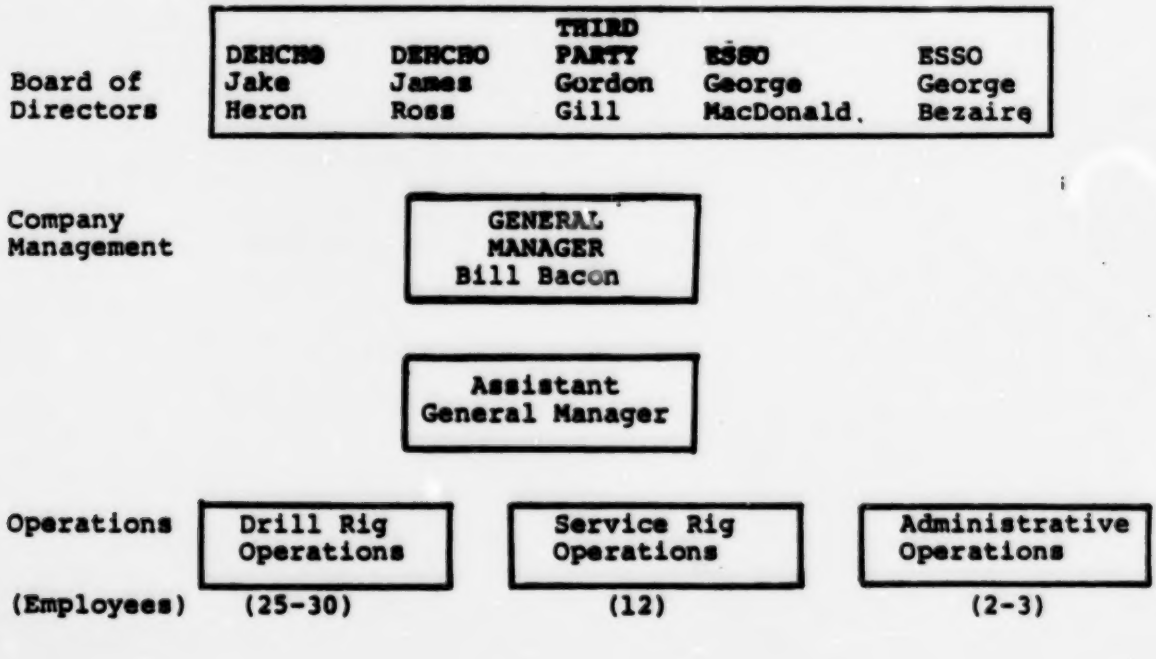
OWNERSHIP OF SHEHTAH DRILLING LTD.



With the formation of this joint venture company, the next task was to create a management board. In this case, a five member Board of Directors was created, consisting of two Esso members and two members nominated by Dehcho. The Dehcho members represent the Dene Nation and the Metis Association of the Northwest Territories. A fifth director is selected who is acceptable to both Dehcho and Esso. Besides the Board of Directors, Shehtah's management structure is composed a management and an operations section. The management section is made up of a general manager and an assistant general manager while the operations group has the responsibility for operating and servicing the drill rig as well as associated administrative operations. The company has employed up to 50 persons and most of these employees work in the drill rig operations (Figure 2).

FIGURE 2

MANAGEMENT STRUCTURE OF SHEHTAH DRILLING LTD. 1983



In July 1983, Shehtah Drilling Ltd. entered into a contract with Esso. This twenty-three month contract called for Shehtah to drill 150 wells in the Norman Wells area, including some on the artifical islands (Esso North, 1983, p. 1).

Unlike other drilling firms hired by Esso, Shehtah's management strategy not only called for its operations to be financially viable and competitive, but also to train and employ skilled native northerners. While the total number of employees was relatively small (about 40 in 1984), about three-quarters of these workers were natives, many of whom were from the nearby settlements (Davies, 1984, p. 15). The success or failure of this joint venture company has important implications for the formation of similar joint ventures between large companies and native organizations and for the participation of native development corporations in future mega industrial projects. In this sense, Shehtah Drilling Ltd. is viewed as ... "a model for the North and for all of Canada." (Esso North, 1983, p. 1).

Following the completion of the Norman Wells Project, prospects for Shehtah Drilling seemed bright because additional drilling work was available in the area and in the Beaufort Sea area. In a normal operating year, Shehtah spends around $1.5 million for wages to people in the north plus about half a million on supplies and services with northern businesses (Native Press, March 14, 1986).

With the drop in oil prices in early 1986, Esso reassessed its situation and they decided to cancel all drilling operations (Native Press, March 27, 1986). The consequences for the joint venture company were severe and Shehtah Drilling had to lay off all its workers. Presumably when oil prices rise again, the Shehtah drilling crews will be called back to work.

3. THE JOINT VENTURE QUESTION

In June 1982, the DIAND socio-economic impact monitoring team met with each community council. The main purpose of these meetings was to present our socio-economic impact monitoring program, to seek their approval of our program and to obtain their reaction to our questionnaire. One result of these consultations was a request by the Norman Wells Hamlet Council for a question on the desirability of joint venture projects between large private companies and native organizations. Their interest in the joint venture issue resulted from the attempts by Esso to establish such a partnership with the native organizations. (Bone, 1984, p. 23).

This question was added to the perception section of the 1982 Household Questionnaire and it has been included in the remaining two household surveys (1984 and 1985) and reads as follows:

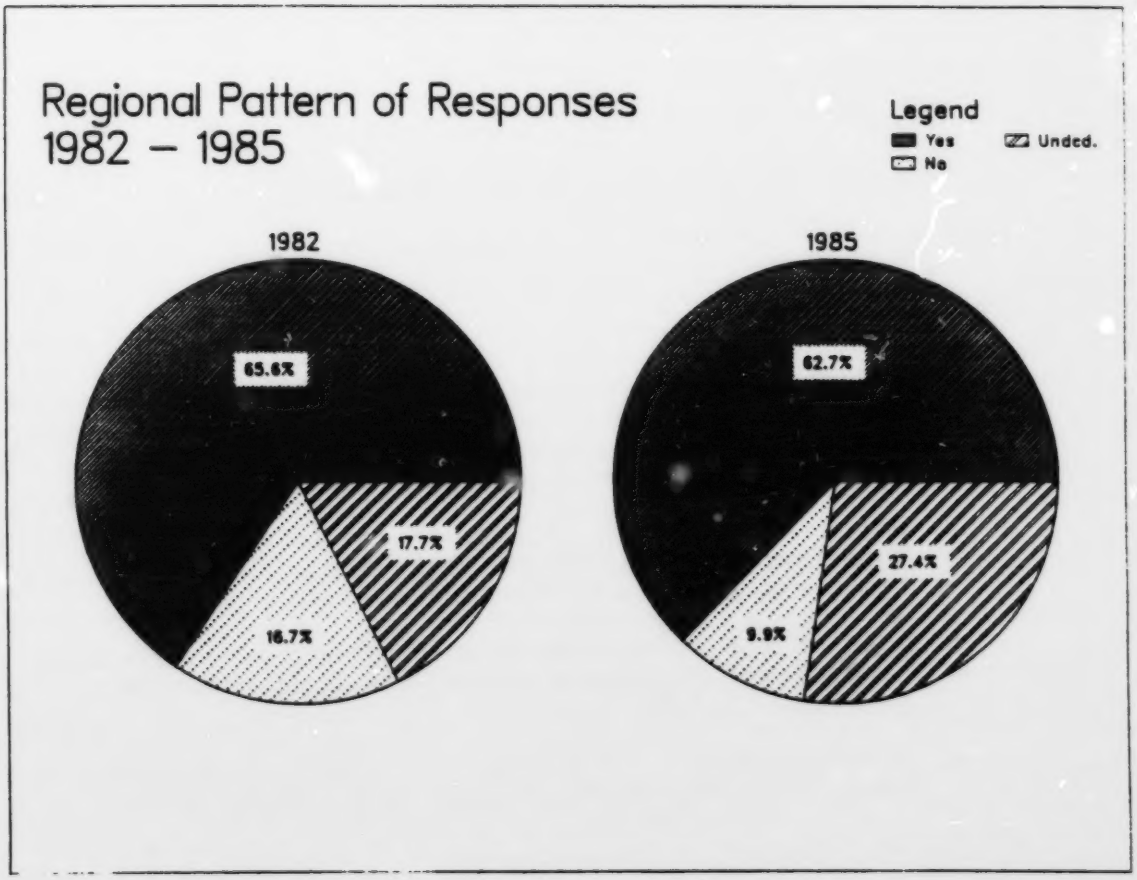
Do you favour joint development projects between private companies and native organizations?

yes ____ no ____ undecided ____

4. RESPONSE CHANGES FROM 1982 TO 1985

The regional pattern of responses from the respondents living in the four communities underwent little change from 1982 to 1985 (Figure 3).

FIGURE 3



While the majority of respondents continued to favour the concept of joint venture projects, there was a slight erosion of the level of support. This drop was less than 3 percentage points, with the "yes" responses falling from 65.6% in 1982 to 62.7% in 1985.

Significantly, there was a much larger decline in those opposing the concept. In 1982, nearly 17% of all respondents were opposed while in 1985, this figure had dropped to just under 10%. Therefore, the major shift in the response pattern from 1982 to 1985 was the shift from both "yes" and "no" responses to "undecided" (Figure 3).

These regional figures mask a dramatic shift in responses by native and non-native respondents (Figure 4). The main changes are:

1. in 1982, native peoples strongly supported the concept of joint venture projects with 71.6% of native respondents saying "yes" as against 8.4% saying "no", leaving 20% in the "undecided" category.

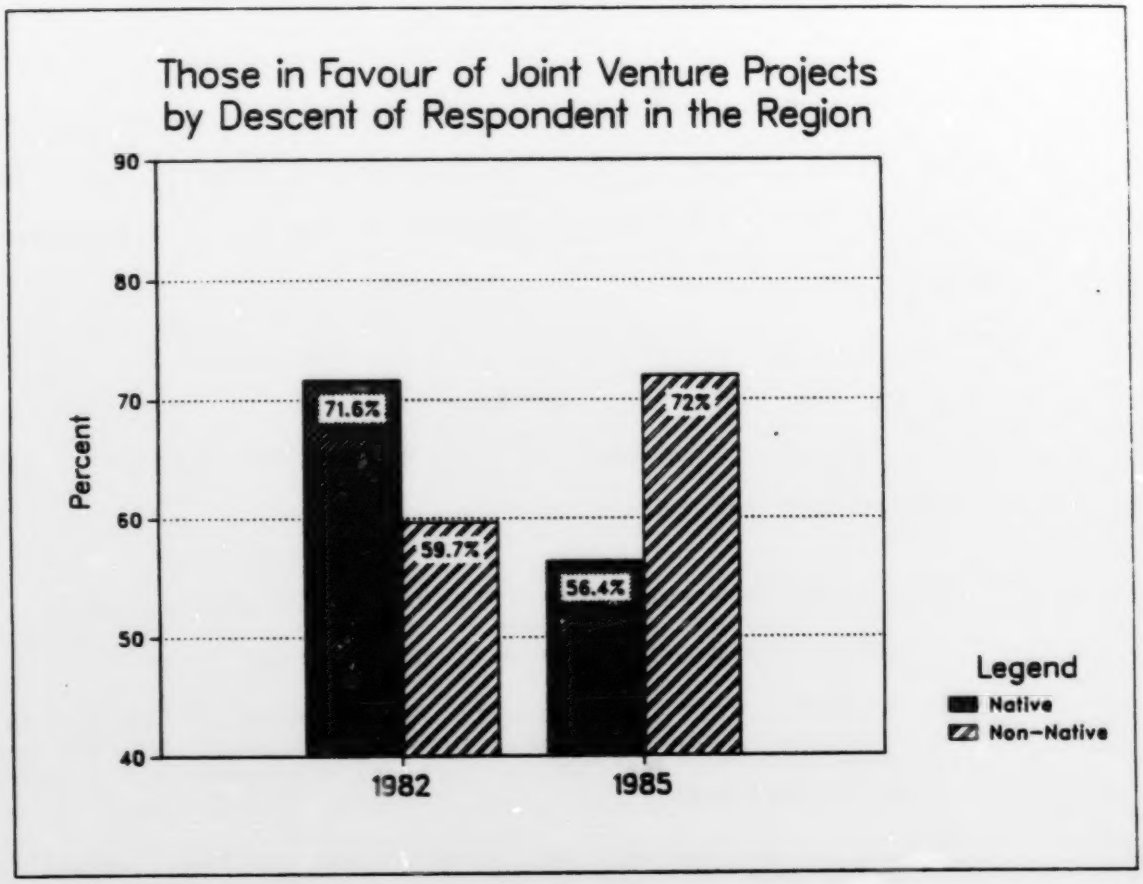
2. while a majority (56.4%) of native respondents still supported the concept in 1985, their level of support had dropped by 15 percentage points.

3. most of the change saw a shift from "yes" responses to "undecided" responses which increased from 20% in 1982 to 32.6% in 1985.

4. significantly, the "no" responses increased only marginally from 8.4% in 1982 to 11.0% in 1985.

While there was a downturn in native support for joint venture projects, there was an offsetting upturn in non-native reaction. A comparison of the 1982 and 1985 responses by non-natives reveals that the "yes" category increased from 59.7% to 72% and the "undecided" responses from 14.5% to 19.7%. At the same time, there was a substantial decline in the "no" responses from 25.8% in 1982 to 8.3% in 1985.

FIGURE 4



B. COMMUNITY VARIATIONS

From earlier studies in this report series, the uniqueness of each of the four communities is apparent (Green and Bone, Report 3-84 and Bone, Report 9-84). These differences be measured in terms of accessibility, descent of residents, economic base, size of the communities and, most importantly, in attitude of residents towards the Norman Wells Project.

For this reason, an analysis of the responses to the joint development question is presented by communities. In turn, other socio-economic variables are examined in order to learn more about their influence upon the type of response. These variables include age, descent, length of residency in the community and sex.

Our examination of change over time in attitudes towards joint ventures focuses on the years 1982 and 1985. There are three reasons for this time frame:

1. since the Norman Wells Project construction began in the 1982 and and ended in the 1982 and 1985 household data provides the fullest longitudinal range,
2. Shehtah Drill began its operations in mid 1983; therefore the perception of respondents in 1985 were more affected by the actual performance of Shehtah Drilling, and
3. the 1984 survey was restricted to two communities while the 1982 and 1985 surveys included all four centers.

5.1 General Pattern

In analyzing the response patterns by communities, there are two major changes. One is the increase in support at Norman Wells and the other is the decrease in support at Fort Simpson. Little change took place in the responses at Fort Norman and Wrigley (Table 1).

TABLE 1

RESPONSES TO THE JOINT VENTURE QUESTION

		Norman Wells	Fort Norman	Wrigley	Fort Simpson
1982	Yes	53.4%	77.8%	52.4%	69.0%
	No	31.5%	8.9%	14.3%	13.0%
	Undcd	15.1%	13.3%	33.3%	18.0%
		n = 73	n = 45	n = 21	n = 184
1984	Yes	69.0%	85.7%	-	-
	No	16.8%	5.7%	-	-
	Undcd	14.2%	8.6%	-	-
		n = 113	n = 35		
1985	Yes	75.4%	72.4%	48.3%	52.2%
	No	7.2%	5.2%	13.8%	12.8%
	Undcd	17.4%	22.4%	37.9%	35.0%
		n = 138	n = 58	n = 29	n = 180

Changes in the response pattern may have been affect by proximity of the respondents to the operations of Shehtah Drilling. The argument being that those closest to this joint venture were better able to observe its operations and evaluate its performance. Accordingly, the highest "yes" responses in 1985 occurred in Norman Wells (75.4%) followed by Fort Norman (72.4%) while Wrigley (48.3%) and Fort Simpson (52.2%) were substantially lower.

5.2 Fort Simpson

Support for joint venture projects by Fort Simpson respondents declined from 69% in 1982 to 52.2% in 1985 (see Table 1). This drop parallels a similar decline in support of increased economic development, i.e., 78.8% of the Fort Simpson respondents were in favour of increased economic development in 1982 compared to 59.4% in 1985 (Stewart, Report 4-85, p. 8).

While a substantial decline in support for joint ventures occurred, there has not been a similar rise in those opposed. For example, those responding negatively to joint ventures did not increase their percentage from 1982 to 1985 but rather remained virtually unchanged at around 13%. In 1982, those responding "no" made up 13% of all respondents while in 1985 this group formed 12.8% (Table 1).

The main response shift was from the "yes" category to the "undecided" category. The "undecided" responses jumped from 18% in 1982 to 35% in 1985. These findings suggest that residents of Fort Simpson have become less certain about the benefits of joint ventures but are unwilling to outright reject the concept.

These changes in responses patterns are also found in the responses to the question on "more economic development" but not in the question "more jobs". A detailed analysis of the development and job issue responses at Fort Simpson is available in an earlier report (Stewart, Report 4-85).

Age of the respondent had an effect upon the pattern of responses to the question on joint development, namely that young respondents tend to be more supportive of joint ventures than older respondents in 1985. While there has been drop in support of joint ventures by all age groups from 1982 to 1985, younger respondents at Fort Simpson remained more supportive of joint projects than older members. For example, nearly 79% of those 24 years of age or under were in favour of joint venture projects in 1982 compared to just over 64% of those 65 years of age and over (Table 2, Appendix A). By 1985, these percentages had dropped to 61% for those in the younger age group and 35% for those in the older age group. The percentage decline by these two age groups is 18 percentage points for the younger group and 26 percentage points for the older one. This finding suggests that the erosion

of support for joint developments was more severe among older residents.

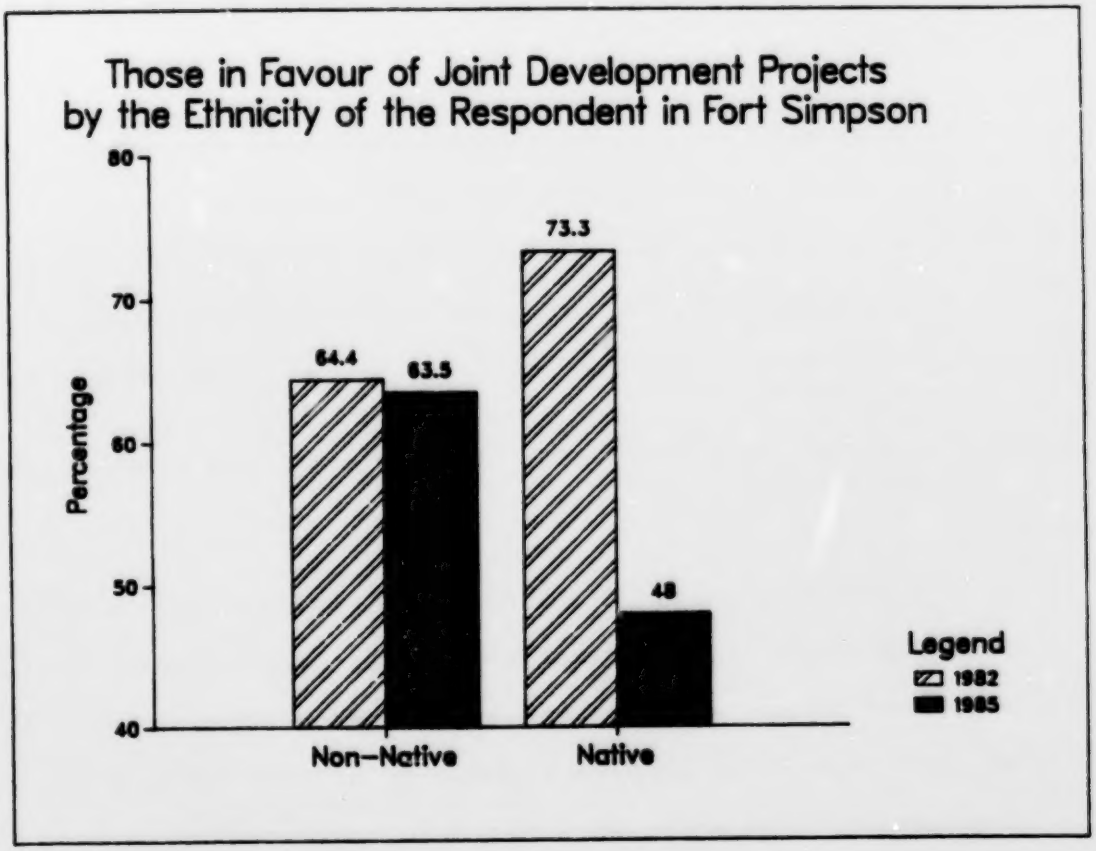
An examination of responses by sex reveals that there was a substantial decrease in support for joint development project by both males and female respondents from 1982 to 1985 at Fort Simpson. The percentage of males who were in favour of joint development projects dropped from 67% to 52% from 1982 to 1985 (Table 3, Appendix A). During the same time period the support by females declined from 71% to 53%. Since the decline in support was very similar (-15% for males and -18% for females), sex does not appear to influence the type of responses to the joint development question (Table 3, Appendix A).

The descent of the respondent had a strong effect upon the type of answer to the joint ventures question at Fort Simpson. Such was not the case at the only other community with an ethnically diverse population, Norman Wells.

At Fort Simpson, the responses by native respondents reveal a drop in those in favour of joint development projects from 73% in 1982 to 48% in 1985 while the support of non-native residents remained steady at around 64% (see figure 5 and Table 3, Appendix A). This drop in native support by 25 percentage points from 1982 to 1985 is a very significant finding. In the authors' opinion, it clearly demonstrates the deep rooted dissatisfaction

with the Norman Wells Project and that this dissatisfaction has spilled over into the joint development issue. It also reflects the dualistic nature of Fort Simpson's population with the non-native residents support for the joint venture projects remaining steady from 1982 to 1985 while native residents support dropped dramatically.

FIGURE 5



The length of residency had an effect upon responses to the joint ventures question. In 1982, there was more support and less opposition to joint developments by long-term Fort Simpson residents than for those having lived in Fort Simpson for under 10 years. By 1985, this pattern had reversed itself. Now, long-term residents are less supportive than short-term residents (Table 5, Appendix A).

In summary, the principal observations about the pattern of responses to the joint ventures question by Fort Simpson respondents are:

1. a general decline in support from 1982 to 1985,
2. a sharp rise in the "undecided" category,
3. a substantial decline in support by native peoples,
4. a greater decline in support by older respondents,
5. a greater decline in support as residence years increased, and
6. similar patterns of decline for both males and females.

A possible explanation for this pattern of responses is accessibility/ familiarization, i.e., Fort Simpson is furthest away from Norman Wells of the three native communities. As noted earlier, the first working example of a joint venture project was Shehtah Drilling whose work has been concentrated around Norman Wells. Also, according to Albertine Rodh, President of the Metis Local in Fort Simpson, local residents have had difficulty

getting work with Shehtah Drilling. This means that few local workers have had any first hand experience with Shehtah Drilling; hence Fort Simpson residents have little basis for supporting/opposing joint ventures.

5.3 Fort Norman

The pattern of responses to the joint ventures question by residents of Fort Norman indicates a high degree of support. This support manifests itself in several ways. First of all, the level of "yes" responses is high for each of the three surveys (1982 - 77.8%; 1984 - 85.7%; and 1985 - 72.4%). For 1982 and 1984, the percentage of positive responses for all the surveyed communities is highest in Fort Norman while in 1985, it is only three percentage points below Norman Wells (see Table 1). Secondly, Fort Norman has the lowest percentage of "no" responses for all three surveys.

Fort Norman "undecided" response pattern follows the general trend of increasing from 1982 to 1985. In 1982, the undecided responses made up only 13.3% of all responses while in 1985, this type of response had expanded to 22.4% (see Table 1).

In analyzing the responses by age, sex, descent and length of residency, the following findings are noted:

1. responses by age of the respondents reveal a general

pattern suggesting that those 40 years of age and older tended to be more supportive of joint ventures in 1982 (Appendix A). This pattern weakens in the 1985 responses, largely because the "undecided" response expanded more rapidly in the older age categories than in the younger ones. In 1985, for example, age group 25 to 39 was the strongest supporter of joint ventures at 78.3% while in 1982, it was the age group 40 to 64 that had the highest positive response (94.1%).

2. responses by sex indicate a shift in support by females. From 1982 to 1985, male respondents support for joint ventures has remained strong (75% in 1982 and 78.8% in 1985). On the other hand, female respondents support has declined from 80% in 1982 to 64% in 1985 (Table 3, Appendix A).

3. responses by descent are mainly by native respondents because Fort Norman had only six non-native households. Therefore, little analysis is possible from so small a population size. Even so, the pattern of responses follows the general trend found in other communities, that is, since 1982 support for joint ventures has declined by 5.1% for native respondents and remained the same for non-native respondents (Table 4, Appendix A).

4. length of residency had an impact upon the type of response by Fort Norman residents. While support for joint ventures in 1982 was fairly even (around 75%) by short and long-term residents, by 1985 a difference had emerged. At this time, the shorter-term residents were very strongly in favour of joint developments (90.9%) while longer-term residents were less supportive (around 65%).

5.4 Wrigley

The Wrigley respondents showed the least interest in joint ventures of all four communities with only about half of the respondents (52.4% in 1982 and 48.3% in 1985) supporting the concept of joint ventures (Table 1). Equally significant, the undecided response from Wrigley was the largest in that category

of all four communities, i.e., in 1982, it was 33.3% while in 1985 it was 37.9% (Table 1). The "no" response remained around 14% for both surveys. In 1985, this percentage of "no" response was the highest of all four communities while in 1982, it was second to Norman Wells which had a "no" response of 31.5%.

The main explanation for this pattern of responses is that Wrigley respondents were less exposed to the Norman Wells Project and to the operations of Shehtah Drilling. Another possibility is that Wrigley residents are more oriented to the traditional land-based economy than the wage economy than residents of the other communities.

An examination of response types is provided below:

1. the age response pattern for Wrigley follows the general trend with the younger respondents more supportive of joint ventures than older members. For example, those under 40 years of age supported the concept as follows: 66.7% in 1982 and 58.3% in 1985 while those over 64 years of age were considerably lower: 37.5% in 1982 and 40% in 1985 (Table 2, Appendix A).

2. while an analysis of the effect of sex upon the responses is limited by the small number (3) of female respondents in 1982 compared to 10 in 1985 (Table 3, Appendix A), their response pattern reveals that females supported the concept of joint development more than males did in both years. In 1982, 66.7% of the female respondents provided "yes" responses while in 1985, they provided 60%. On the other hand, male respondents gave much lower levels of support, i.e., 50% in 1982 and 42.1% in 1985 (Table 4, Appendix A).

3. the pattern of responses by descent indicates a decline in support for joint development projects by native respondents from 1982 to 1985. In 1982, the

level of support was 52.4% while in 1985 it had dropped to 42.3% (Table 4, Appendix A). In 1982 and 1985, this level of support was the lowest by native respondents in all four communities. Surprisingly, the non-native respondent group at Norman Wells was marginally lower than the native Wrigley respondents in 1982.

4. since there were no Wrigley non-native respondents in 1982 and only three in 1985, no conclusions should be drawn about change over time for non-natives.

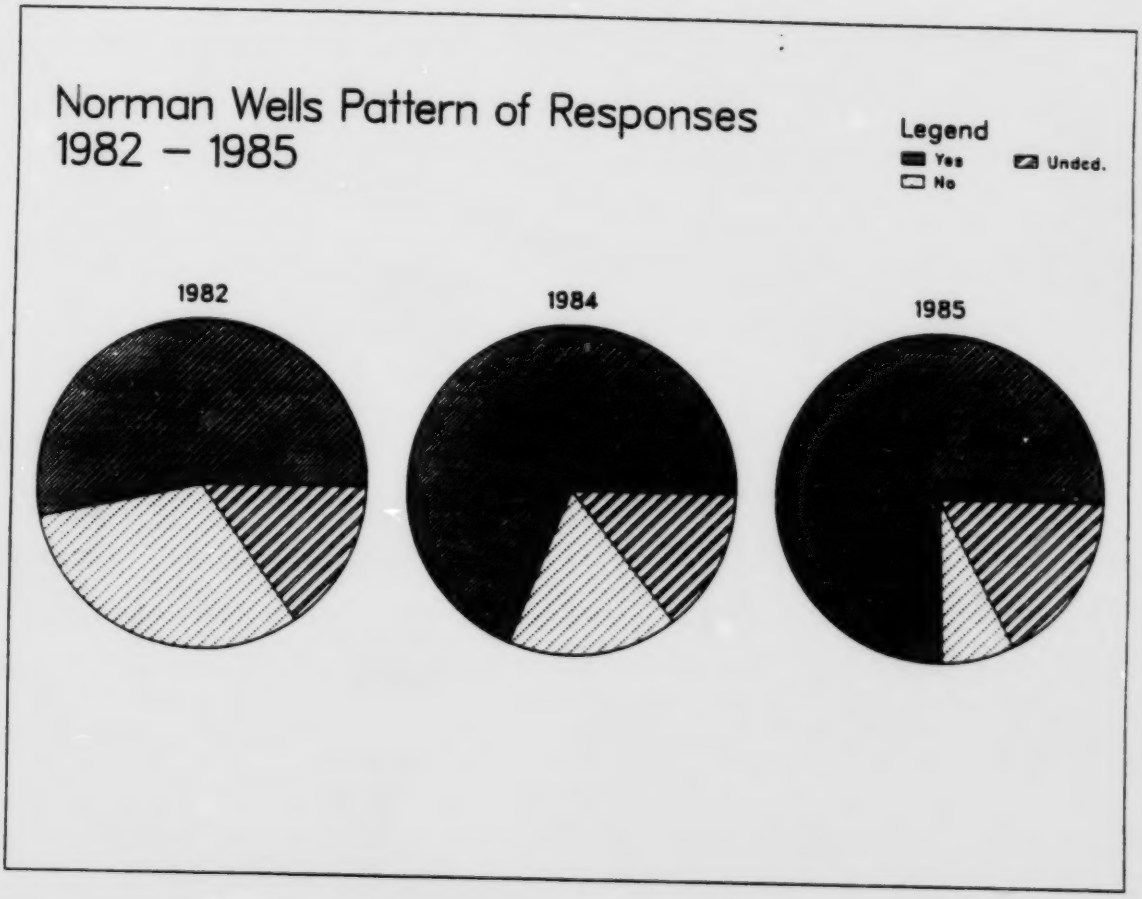
5. similarly, with most of the respondents falling into one residence category (residing in Wrigley for 16 or more years), any analysis of these responses is severely limited.

5.5 Norman Wells

Norman Wells is the community with the most experience with joint venture projects. For this reason, its pattern of responses and their changes are of special interest. At the same time, the reader should keep in mind that the vast majority of Norman Wells residents are non-natives.

In 1982, the residents of Norman Wells were rather skeptical about the possibilities of success of joint ventures. Only about half (53%) were in favour of joint ventures between private companies and native organizations; 32% were against joint developments; and 15% were undecided (Figure 6). The 1982 Norman Wells opposition to joint development projects represents the highest level (32%) recorded in any of the four communities. The next highest "no" response occurred at Wrigley (14.3%) in 1982.

FIGURE 6



By 1984, the feelings of the residents of Norman Wells towards the joint venture concept had changed. Overall, those against joint developments had dropped from 32% in 1982 to 17% in 1984. It appears that with Shehtah Drilling in operation, the residents of Norman Wells began to see that it was going to be a successful, competitive drilling company involving a high

percentage of native workers. This new respect is revealed in the changing perceptions of the two groups most against joint developments in 1982, the non-native respondents and male respondents. From 1982 to 1984, the support of non-native residents had risen from 52% to 66% while male support jumped sharply from 42% to 73% (Table 3 and 4, Appendix A).

By 1985, the earlier rather negative view of joint developments held by Norman Wells residents had disappeared and the support for joint venture developments reached very high levels (Figure 6). For example, while 32% of the respondents at Norman Wells were against joint developments in 1982 and 17% in 1984, by 1985 only 7% fall into this category. Support by non-native residents increased to 75% while that of native residents to 77%. Support by males rose to 78% while females reached 73%.

The sharp differences in responses from 1982 to 1982 at Norman Wells are virtually the reverse of the responses at Fort Simpson. The main explanation for these differences is thought to be related to the degree of exposure to Shehtah Drilling operations, i.e., as distance from Norman Wells increases, the degree of familiarity with the main joint venture declines.

6. CONCLUSIONS

The responses to the question on joint venture projects

clearly indicates that a majority of the respondents favour such enterprises. Equally significant is the finding that support by native respondents dropped while that for non-natives has increased. Other major findings are:

1. community support declined as distance from Norman Wells increased, suggesting that the greater the exposure to Shehtah Drilling operations, the larger the support,
2. as age of the respondents increased, support decreased, and
3. as the length of residency increased, support also declined.

Since the four communities contain significant differences, each center was examined separately. In analyzing responses by communities, particular patterns were identified. These were:

1. Norman Wells:- the only increase in support for joint ventures from 1982 to 1985 in the four communities,
2. Fort Simpson:- the greatest decline in support,
3. Fort Norman:- the most stable support, and
4. Wrigley:- the largest "undecided" responses.

The concept of a joint venture between native organizations and large private companies is a new and novel approach to regional development. Its principal objective is to increase the direct participation of native peoples in the development process and to gain "hands-on" experience. There is no doubt that native peoples and their organizations are still somewhat unsure of this

approach. On the other hand, the Shehtah Drilling partnership between the developers of the Norman Wells Project and the two native organizations ensured that there was an ownership role for native peoples in one area of this mega project. The real question is whether this joint venture provides a model for future industrial developments in the north and the answer to that questions lies in the assessment of native peoples of Shehtah Drilling.

7. REFERENCES

1. Bone, R.M., 1984. THE DIAND NORMAN WELLS SOCIO-ECONOMIC MONITORING PROGRAM. Report 9-84. (Ottawa: Department of Indian Affairs and Northern Development).

2. Bower, Ted, 1983. "Dene, Metis, Esso Begin Drilling Together", ESSO NORTH, Vol. 2, No. 4, pp. 1-2.

3. _____, 1984. "Shehtah: 'A Good Place to Learn', ESSO NORTH, Vol. 3, No. 1, p. 8.

4. Davies, Paul. "Shehtah Drilling Ltd.", APOA REVIEW, Vol. 7, No. 1, pp. 11-15.

5. GLOBE AND MAIL, March 29, 1983.

6. Green, M.B. and R.M. Bone, 1984. ANALYSIS OF RANKINGS OF SOCIO-ECONOMIC IMPACTS OF THE NORMAN WELLS PIPELINE PROJECT. Report 3-84. (Ottawa: Department of Indian Affairs and Northern Development).

7. CANADA, 1983. "Federal Funding For Dene/Metis/Esso Joint Venture Company", NEWS RELEASE, 1-8314, pp. 1-6.

8. Federal Environmental Assessment Review Office, 1981. NORMAN WELLS OILFIELD DEVELOPMENT AND PIPELINE PROJECT. Report of the Environmental Assessment Review Panel, No. 16.

9. Selleck, Lee, 1986. "Shutdown Considered For Shehtah's Rig", NATIVE PRESS, Vol. 16, Issue 5, (March 14, 1986), p. 1.

10. _____, 1986. "Shehtah Rig Crews Are Laid Off", NATIVE PRESS, Vol. 16, ISSUE 6,(March 27, 1986), p. 3.

11. NEWS NORTH, September 16, 1983.

12. Stewart, David A., 1985. Personal Communications with Albertine Rodh, President of the Fort Simpson Metis Local.

13. _____ , 1986. ECONOMIC DEVELOPMENT AND JOBS: CHANGES IN PERCEPTIONS IN THE STUDY COMMUNITIES. Report 4-85. (Ottawa: Department of Indian Affairs and Northern Development).

8. APPENDIX A

Table 2 Response to Those in Favour of Joint Venture Projects by the Age of the Respondent

		Norman Wells				Fort Norman			
		<24	25-39	40-64	≥65	<24	25-39	40-64	≥65
1982	Yes	50.0	56.5	47.1	-	40.0	68.8	94.1	85.7
	No	40.0	23.9	47.1	-	20.0	18.7	0.0	0.0
	Undcd.	10.0	19.6	5.8	-	40.0	12.5	5.9	14.3
	n =	10	46	17	0	5	16	17	7
1984	Yes	66.7	71.6	60.9	100.0	85.7	84.6	88.9	83.3
	No	13.3	16.2	21.7	0.0	0.0	7.7	0.0	16.7
	Undcd.	20.0	12.2	17.4	0.0	14.3	7.7	11.1	0.0
	n =	15	74	23	1	7	13	9	6
1985	Yes	84.2	72.7	81.8	66.7	66.7	78.3	68.4	69.2
	No	15.8	6.8	0.0	11.1	33.3	4.3	5.3	0.0
	Undcd.	0.0	20.5	18.2	22.2	0.0	17.4	26.3	30.8
	n =	19	88	22	9	3	23	19	13

		Wrigley				Fort Simpson			
		<24	25-39	40-64	≥65	<24	25-39	40-64	≥65
1982	Yes	-	66.7	57.1	37.5	78.8	67.5	66.7	64.3
	No	-	16.7	0.0	25.0	6.1	18.1	13.0	0.0
	Undcd.	-	16.6	42.9	37.5	15.1	14.4	20.3	35.7
	n =	0	6	7	8	33	83	54	14
1985	Yes	0.0	58.3	45.5	40.0	60.5	59.7	40.0	35.0
	No	0.0	16.7	18.2	0.0	15.8	10.4	17.8	5.0
	Undcd.	100.0	25.0	36.3	60.0	23.7	29.9	42.2	60.0
	n =	1	12	11	5	38	77	45	20

Table 3 Response to Question on Those in Favour of Joint Venture Projects by the Sex of the Respondent

		Norman Wells		Fort Norman		Wrigley		Fort Simpson	
		M	F	M	F	M	F	M	F
	Yes	41.7	64.9	75.0	80.0	50.0	66.7	67.3	71.4
1982	No	41.7	21.6	15.0	4.0	11.1	33.3	17.2	7.1
	Undcd	16.6	13.5	10.0	16.0	38.9	0.0	15.5	21.5
	n =	36	37	20	25	18	3	110	70
	Yes	72.6	64.7	94.4	72.7	-	-	-	-
1984	No	17.7	15.7	5.6	9.1	-	-	-	-
	Undcd	9.7	19.6	0.0	18.2	-	-	-	-
	n =	62	51	18	11				
	Yes	78.1	73.0	78.8	64.0	42.1	60.0	52.3	52.8
1985	No	9.4	5.4	3.0	8.0	15.8	10.0	18.2	7.7
	Undcd	12.5	21.6	18.2	28.0	42.1	30.0	29.5	39.5
	n =	64	74	33	25	19	10	88	91

Table 4 Response to Question on Those in Favour of Joint Venture Projects by the Descent of the Respondent

		Norman Wells		Fort Norman		Wrigley		Fort Simpson	
		N	N/N	N	N/N	N	N/N	N	N/N
	Yes	83.3	51.5	76.3	83.3	52.4	-	73.3	64.4
1982	No	16.7	33.3	7.9	16.7	14.3	-	6.7	20.7
	Undcd.	0.0	15.2	15.8	0.0	33.3	-	20.0	14.9
	n =	6	66	38	6	21	0	90	87
	Yes	100.0	66.4	90.6	71.4	-	-	-	-
1984	No	0.0	18.3	4.7	14.3	-	-	-	-
	Undcd.	0.0	15.3	4.7	14.3	-	-	-	-
	n =	7	104	21	7				
	Yes	77.4	74.8	71.2	83.3	42.3	100.0	48.0	63.5
1985	No	9.7	6.5	5.8	0.0	15.4	0.0	12.6	13.5
	Undcd.	12.9	18.7	23.0	16.7	42.3	0.0	39.4	23.0
	n =	31	107	52	6	26	3	127	52

Table 5 Response to Question on Those in Favour of Joint Venture Projects by the Length of Residency of the Respondent

		Norman Wells				Fort Norman			
		1-5	6-10	11-15	≥16	1-5	6-10	11-15	≥16
1982	Yes	53.9	50.0	50.0	60.0	75.0	71.4	-	80.0
	No	26.9	42.9	50.0	40.0	12.5	14.3	-	6.7
	Undcd.	19.2	7.1	0.0	0.0	12.5	14.3	-	13.3
	n =	52	14	2	5	8	7	0	30
1984	Yes	72.8	50.0	40.0	75.0	87.5	80.0	-	86.4
	No	14.1	25.0	40.0	25.0	12.5	0.0	-	4.5
	Undcd.	75.5	25.0	20.0	0.0	0.0	20.0	-	9.1
	n =	92	12	5	4	8	5	0	22
1985	Yes	75.5	76.6	54.6	100.0	90.9	87.5	66.7	63.9
	No	5.0	11.7	27.3	0.0	9.1	12.5	0.0	2.8
	Undcd.	19.5	11.7	18.1	0.0	0.0	0.0	33.3	33.3
	n =	101	17	11	9	11	8	3	36

		Wrigley				Fort Simpson			
		1-5	6-10	11-15	≥16	1-5	6-10	11-15	≥16
1982	Yes	-	100.0	-	50.0	66.2	70.8	76.9	70.0
	No	-	0.0	-	15.0	20.8	12.5	7.7	5.7
	Undcd.	-	0.0	-	35.0	13.0	16.7	15.4	24.3
	n =	0	1	0	20	77	24	13	70
1985	Yes	80.0	50.0	100.0	38.1	58.3	60.9	30.0	49.5
	No	20.0	0.0	0.0	14.3	12.5	8.7	30.0	12.1
	Undcd.	0.0	50.0	0.0	47.6	29.2	30.4	40.0	38.4
	n =	5	2	1	21	48	23	10	99